



FEDERATION FOR CHILDREN  
WITH SPECIAL NEEDS

# Family **FACTS** on Education

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## Student Growth Percentiles: What they mean for students



### “How is my child doing in school?”

Parents are eager to get an answer to this question. To help answer the question, the *MCAS Parent/Guardian Report* includes information on “Student Growth Percentiles” which shows how much a student has grown academically since the previous year. This issue of *Family FACTS* emphasizes its application to individual students. Another Family FACTS called “Student Growth Percentiles: What they tell us about schools, districts, and groups of students” explores how student growth performance data can shed light on school and district performance.

The *MCAS Parent-Guardian Report* contains information that shows how much a student has progressed since the previous year—a student’s academic growth. Using a student’s performance levels on the Massachusetts statewide assessments (MCAS), a measure of growth called the **Student Growth Percentile**, or **SGP** is calculated. SGP answers the question: How much did a student grow academically over the previous year?

### What is Student Growth Percentile?

*SGP is a measure of how much a student has improved—or grown—academically from one year to the next as compared to his or her academic peers. An “academic peer” is a student who has had the same or similar MCAS test scores over a period of years. A student has a different group of academic peers for English Language Arts (ELA) and Mathematics. SGP allows parents and educators to see whether a student has progressed similar to, greater than, or less than other students who had similar MCAS scores in the past.*

### Why is comparison to academic peers important?

Comparing students to others who have the same or similar MCAS scores over time gives a clearer picture of their growth because it takes into account each student’s starting point. A student’s achievement

#### MCAS Parent/Guardian Report Breakdown

The MCAS Parent/Guardian Report shows how each student did on the spring MCAS tests. Traditionally, the report answered the question: How well has this student learned the grade-level learning standards? Students score into one of four performance levels shown below:

##### Scaled Score Ranges and Corresponding Performance Levels

Scaled Score Range	Performance Level
200–218	Warning/Failing
220–238	Needs Improvement
240–258	Proficient
260–280	Advanced

Information on MCAS achievement levels continues to be a very important part of the report as it offers a simple, clear way of seeing a student’s current achievement as compared to learning standards. “Proficiency” remains a critical benchmark. “Proficiency” means the student is able to do grade-level academic work.

level on an MCAS test is an *absolute measure* of the student's mastery of learning standards at a particular point in time. SGP, on the other hand, is a *relative measure* as it shows change in comparison to a student's academic peers. This approach means that every student has the opportunity to demonstrate high or low growth, regardless of his or her MCAS performance level.

### How does SGP show a student's growth?

Student growth percentiles are calculated directly from MCAS data. It is the rate of change students make from year to year in relation to their academic peers. The rate of change is called a "percentile" that can range from 1 to 99. Lower numbers indicate lower academic growth and higher numbers show higher growth. Scores of the students in the middle of the scale, half way between highest and lowest, represent moderate growth. Students receive a SGP for both ELA and Mathematics.

This example illustrates what SGP means for an individual student:

Sasha is grouped with students who – just like her – earned a score of 230 on the MCAS ELA test in 5th grade and 230 the ELA test in 6th grade. These students with the same scores over the two years are Sasha's *academic peers*. In seventh grade, Sasha once again scored 230 in ELA. This 230 score gave Sasha a SGP of 35. A SGP of 35 means that in *comparison to her academic peers* Sasha scored higher than 35% of them on the 7<sup>th</sup> grade MCAS ELA test. Sixty-five percent of Sasha's academic peers got higher MCAS ELA scores than she did. In other words, most of Sasha's academic peers made more progress than she did over the past year.

### Who will get an SGP?

Students in grades 4 through 8 and grade 10 who have at least two years in a row of MCAS results will receive SGPs. Students in grade 10 who have attended Massachusetts public schools in 8<sup>th</sup>, 9<sup>th</sup> and 10<sup>th</sup> grades will also receive SGPs.

Since two years of MCAS tests scores are needed to chart growth, no growth percentiles can be shown for grade 3 because grade

3 is the first grade of MCAS testing. Growth percentiles will also not be available for science because science is only tested in grades 5, 8, and high school. Students who took the MCAS-Alt for the two most recent MCAS tests will not receive SGPs, nor will MCAS retest results be used in calculating student growth percentiles.

### What Does SGP Mean for My Child?

It is important to remember that SGP is just another way for parents to better understand their children's academic progress. Behind each student's percentile is a story. Parents and teachers together should explore the reasons for high or low levels of growth. Questions like these can provide a good starting point:

- **What might it mean that my child received an SGP of 80?** Did you do something different at home to support your child's learning, such as providing help and structure for homework? Did the school provide tutoring? Did the teacher use a new accommodation or different style of teaching?
- **What might it mean that my child received an SGP of 25?** Did something change in your child's or family's life, such as a move to a new school or health issues? Was there trouble at school, such as bullying? Did the classroom instruction fully meet your child's needs?

Student Growth Percentiles are a valuable tool to help parents and teachers work together to support children's academic success. Just as SGP can help understand a student's performance, SGP data can also help parents understand growth of all students in their child's school and district. Applying SGP data to schools, districts, and various groups of students is discussed in the issue of Family FACTS called "Student Growth Percentiles: What they tell us about schools, districts, and groups of students."

#### Sources/Resources for Student Growth Percentiles:

"MCAS Student Growth Percentiles: Interpretive Guide." (March, 2011). Massachusetts Department of Elementary & Secondary Education. Malden, MA. Online at [www.doe.mass.edu/mcas/growth/InterpretiveGuide.doc](http://www.doe.mass.edu/mcas/growth/InterpretiveGuide.doc).



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